

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



ETHANOL SYRUP EXEMPTION (ANAEROBIC DIGESTION)

In accordance with the provisions of Section 11507 of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and the rules promulgated under Part 115, specifically R 299.4119, syrup generated in the production of ethanol (Syrup) is granted a site/source-separated exemption by the authorized representative of the Director of the Michigan Department of Environmental Quality (MDEQ).

This exemption is subject to the following conditions:

- 1. This approval is limited to syrup that is produced from the production of ethanol using corn.
- 2. The Syrup shall only be used as a feed stock in an anaerobic digester that is operated in compliance with Part 55, Air Pollution Control, of the NREPA. Anaerobic digestion is the harnessed and contained, naturally occurring process of anaerobic decomposition. An anaerobic digester is an industrial system that harnesses these natural process to treat waste, produce biogas that can be used to power electricity generators, provide heat, and produce soil improving material.
- 3. Each generator intending to operate pursuant to this exemption shall notify the Director of the MDEQ, in writing, of his or her intent. Notification shall be sent to the Waste and Hazardous Materials Division (WHMD) District Office. A list of the District Offices is attached in Appendix A.
- 4. The notification to the WHMD shall include a management plan that must be approved by the MDEQ that describes how the material will be managed during storage (both on-site and off-site), processing, and transportation.
- 5. The Syrup shall not be stored in a manner constituting speculative accumulation per R 299.4119. The owner/operator of a site must be able to demonstrate compliance with this condition.
- 6. The Syrup shall not come into direct contact with surface water, groundwater, or wetland areas as defined by the NREPA, and the administrative rules promulgated thereunder, unless approved or permitted by the MDEQ.
- 7. Processing, storage, transporting, or use of the Syrup shall be managed in such a way to prevent nuisance conditions in violation of Part 115 and Part 55 or the rules promulgated under Part 55.

- 8. Vehicles used to transport the Syrup shall be licensed under Part 121, Liquid Industrial Wastes, of the NREPA.
- 9. The generator of the Syrup shall obtain a Site Identification Number in compliance with Section 12103(1)(b) of Part 121 and manage the Syrup pursuant to Part 121.
- The owner of the anaerobic digester shall obtain a Site Identification Number in compliance with Section 12112(1)(a) of Part 121 and manage the Syrup pursuant to Part 121.
- 11. Storage of the Syrup, prior to use, shall be in a tank; a container; a surface impoundment that has been permitted under Part 31, Water Resources Protection, of the NREPA; or other similar structure that is approved by the Director of the MDEQ.
- 12. The Syrup shall be tested on a quarterly basis for the parameters listed below unless the MDEQ has approved an alternate time frame or modified list of parameters. The results shall be kept by the company for a period of three years and shall be made available to the MDEQ upon request.

Solids and Nutrients	Toxicants
Percent Dry Solids	Arsenic (milligrams/kilograms
	[mg/kg])
Percent Total Kjeldahl Nitrogen	Barium (mg/kg)
Percent Ammonium Nitrogen	Cadmium (mg/kg)
Percent Nitrate Nitrogen	Chromium (mg/kg)
Percent Phosphorus	Copper (mg/kg)
Percent Potassium	Lead (mg/kg)
Calcium (mg/kg)	Mercury (mg/kg)
Magnesium (mg/kg)	Molybdenum (mg/kg)
Sodium (mg/kg)	Nickel (mg/kg)
Chloride (mg/kg)	Selenium (mg/kg)
Sulfate (mg/kg)	Silver (mg/kg)
pH	Zinc (mg/kg)
5-Day Biochemical Oxygen	Aluminum (mg/kg)
Demand	<u> </u>
	Manganese
·	Iron (mg/kg)
	Boron (mg/kg)
	Ethanol

13. The results of testing shall be submitted to each anaerobic digester using the Syrup.

14. By January 31st of each year, a report shall be submitted to the MDEQ that details the total volume of Syrup shipped and the location(s) where the Syrup was sent. The report shall be sent to:

> Mr. Duane Roskoskey Storage Tank and Solid Waste Section Waste and Hazardous Materials Division Michigan Department of Environmental Quality P.O. Box 30241 Lansing, Michigan 48909-7741

- 15. This approval shall immediately become void for any of the following reasons:
 - a. The conditions of this approval are violated.
 - b. Additional information demonstrates that the processing, use, or storage of the Syrup is causing environmental contamination.
 - c. New state or federal regulations are promulgated that would cause this approval to become invalid.

Since the Syrup has been designated a site/source-separated material, any facility that processes the Syrup will not require a processing plant license pursuant to Part 115 provided they do not take a regulated solid waste and they operate in compliance with the conditions contained in this approval.

Violation of the conditions of this approval is subject to the enforcement provisions of Parts 55. 115, and 121 of the NREPA or other applicable state and federal laws/statutes.

> STATE OF MICHIGAN Department of Environmental Quality

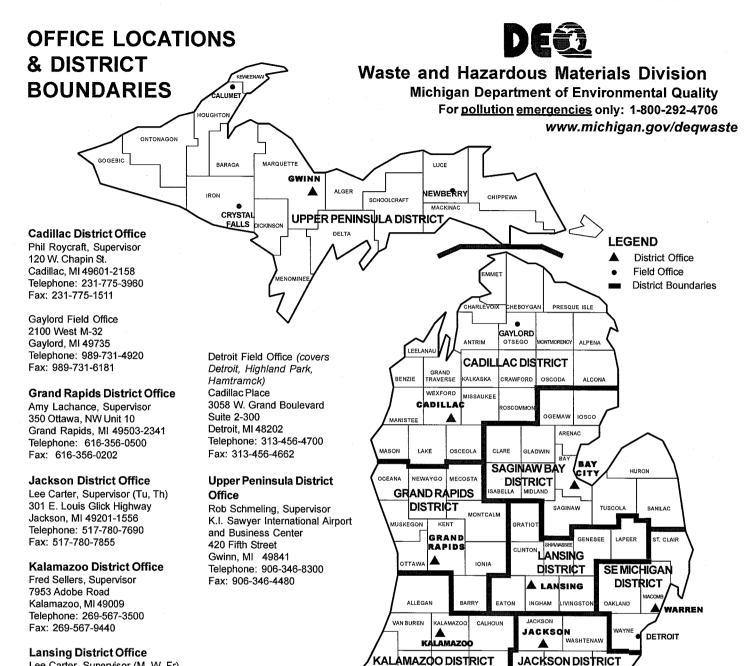
By:

George W. Bruchmann, Chief

Waste and Hazardous Materials Division

Dated: ___ /@-/7-07

Attachment



Lee Carter, Supervisor (M, W, Fr) Constitution Hall North Tower, 4th Floor (525 W. Allegan St.) P.O. Box 30242 Lansing, MI 48909 Telephone: 517-335-6010

Fax: 517-241-3571

Saginaw Bay District Office

Terry Walkington, Supervisor 503 N. Euclid Ave., Suite 1 Bay City, MI 48706-2965 Telephone: 989-686-8025 Fax: 989-684-9799

Southeast MI District Office

Larry AuBuchon, Solid Waste Program/Tire Program (Acting) Supervisor Larry AuBuchon, Hazardous Waste/Tank Program Supervisor 27700 Donald Court Warren, MI 48092

Telephone: 586-753-3700 Fax: 586-753-3859

MAIN OFFICE DEQ Waste and Hazardous Materials Division

George Bruchmann, Chief

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BRANCH

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525 W. Allegan St.

Lansing, MI 48909-7741

ST. JOSEPH

Lansing, MI 48933

Telephone: 517-335-2690

Fax: 517-373-4797

For general DEQ information

DEQ Environmental Assistance Center

Telephone: 1-800-662-9278

Fax: 1-517-241-0673

E-mail: DEQ-EAD-env-assist@michigan.gov